

# CROSS TALK

Edition 85 - August 2001

## Pollution Prevention Initiatives

### Navy STAAMPs Out Waste

The Navy has implemented a pollution prevention approach to purchasing and disposing of shop towels which is available to all Department of Defense (DoD) entities. The Shop Towel Afloat/Ashore Management Program (STAAMP) is a Navy contractor-supported shop towel rental service to replace one-time use baled rags in the clean-up of oil, grease, and hydraulic fluid in order to reduce waste. The rental service provides 18 inch by 18 inch, 100 percent cotton towels, which provide maximum absorbency and durability; one rented towel is equal to five baled rags in absorbency. Installations contact the contractors to provide new towels and pick up hazardous materials soaked towels, which are then laundered by the contractors in compliance with EPA guidelines. Aside from reducing procurement costs, the program is expected to reduce compliance costs related to storage space and hazardous waste disposal.

Contracts are in place in 31 states and the District of Columbia. The Navy estimates that STAAMP users will save unit cost of \$0.63 and \$1.61 over purchase and disposals. For a list of reuse shop towel recycler contractors, call PRO-ACT at DSN 240-4214 or access <https://www.denix.osd.mil/denix/Public/News/NAVSUP4C3/Programs/Shoptowel/stwhy.html#good>.

### Kelly AFB Closes, Cleanup Continues

Last month, Kelly AFB in San Antonio closed after a long operating history that began before World War I. The 1,879 acres that were once Kelly AFB is now KellyUSA, a modern business park for aircraft maintenance and cargo facilities under the management of the Greater Kelly Development Authority (GKDA).

As the base undergoes its transformation, the Air Force Base Conversion Agency staff remains committed to cleanup of environmental contamination that occurred over Kelly's longstanding history. There are currently more than 35 sites with contaminated soil and groundwater requiring varying degrees and lengths of environmental cleanup and monitoring which could take up to several decades. AFBCA estimates the last environmental remedy will be in place by 2004.

### What's Inside . . .

<b>Conference Corner</b> .....	2
<i>DoD Recycling Workshop</i>	
<i>NRC Recycling Congress</i>	
<b>New Tools &amp; Guidance</b> .....	2
<i>Interpretive Documents Website</i>	
<b>EPA FY 2001 Priorities</b> .....	3
<b>2001 EQ Resource CD</b> .....	4
<b>Electronics Recycling</b> .....	5
<b>Technical Inquiry Roundup</b> .....	6

To date, environmental cleanup at Kelly AFB has totalled approximately \$235 million and another \$250 million is expected to be spent before all the sites are brought into EPA and state compliance. The GKDA has entered a 50-year lease with the Air Force since the Comprehensive Environmental Response, Compensation and Liabilities Act (CERCLA), requires environmental systems to be in place and approved by regulatory officials before any deeds can be transferred. *(Adapted from AFMC Public Affairs)*

## In Our Customers Own Words...

"The staff was very professional and helpful. The researcher contacted me promptly by phone to let me know what results she found and directed me to the PRO-ACT website for other beneficial information."

Staff Sergeant Aranda  
78 AMDS/SGPB  
Robins AFB, GA



**PRO-ACT**

A Base-level Pollution Prevention Resource sponsored by HQ Air Force Center for Environmental Excellence



## Conference Corner

### DoD Recycling Workshop

The DoD Recycling Workshop will be held during the Solid Waste Association of North America's WASTECON, 15-18 October 2001 in Baltimore, Maryland. Workshop information will be posted on the HQ AFCEE/EQ website at <http://www.hqafcee.brooks.af.mil/eq/wastecon/wastecon.htm>, or contact Ms. Nancy Carper, HQ AFCEE/EQT, at DSN 240-4964 or by email at [nancy.carper@hqafcee.brooks.af.mil](mailto:nancy.carper@hqafcee.brooks.af.mil).



### NRC Recycling Congress

The 20<sup>th</sup> Annual National Recycling Congress (NRC) and Exposition will be held in Seattle, Washington, September 30 - October 3, 2001. "2001: A Recycling Odyssey" will be the theme for this year's Congress which will provide an informative overview of the current



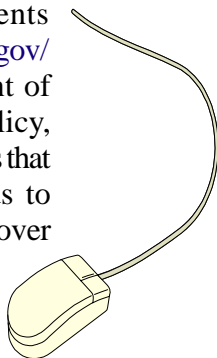
state of recycling and future. The White House Task Force on Recycling has teamed with the NRC to offer Federal educational sessions to Federal attendees. For registration information, visit the NRC's website at [www.nrc-recycle.org](http://www.nrc-recycle.org).

Click on "Annual Conference" and "NRC's Conference Registration" for a copy of the registration form.

## New Tools and Guidance

### Interpretive Documents Website

The EPA's Interpretive Documents Collection website <http://www.epa.gov/guidance/> provides a central point of access to non-binding general policy, guidance, and interpretive documents that describe how the Agency intends to exercise its discretionary authority over statutes and regulations.



## CrossTalk

CrossTalk, published monthly by PRO-ACT, a service of the Environmental Quality Directorate, Headquarters Air Force Center for Environmental Excellence (HQ AFCEE/EQ), Brooks Air Force Base, Texas.

Contents of CrossTalk are not necessarily the official views of, or endorsed by, the U.S. Government, the Department of Defense or the Department of the Air Force. Reference to any commercial product or company does not imply endorsement by the government or any of its agencies.

Readers may submit articles or photographs for publication. Material will be edited, however, to conform to PRO-ACT and Air Force guidelines.

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## EPA FY 2001 Priorities

The Environmental Protection Agency (EPA) Office of Compliance Assistance released a table of environmental priority areas, which will be the focus issues for Fiscal Year 2001. These priorities were identified through the EPA's planning and budget process between EPA Headquarters and the EPA Regional Headquarters. Through stakeholder feedback and discussions between EPA Headquarters and regional offices, the EPA developed agreements addressing each of following program offices.

### Office of Air and Radiation:

- ✎ Implement the National Ambient Air Quality Standards (NAAQS) for ozone and particulates.
- ✎ Create a Clean Air Partnership Fund to provide opportunities for cities, states, and tribes to partner with the private sector, federal government, and each other.
- ✎ Set new Tier II mobile source emission standards.
- ✎ Coordinate the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) and the Clean Air Act.
- ✎ Move toward a risk-based air toxic program.
- ✎ Continue progress on making Kyoto Protocol acceptable for ratification.
- ✎ Help protect children from indoor air hazards.

### Office of Prevention, Pesticides and Toxic Substances:

- ✎ Conduct program outreach, facilitating dialogue among regional chemical manufacturers, stakeholders, and OPPT.
- ✎ Assist in the development of lead-based paint training, accreditation, and certification programs; implement lead-based paint regulations; conduct public outreach and education.
- ✎ Promote integration of pollution prevention strategies into regional, state, and tribal programs.
- ✎ Develop ground water pesticide management plans.
- ✎ Address pesticide safety (worker protection).
- ✎ Address urban pesticide misuse.

### Office of Water:

- ✎ Develop watershed restoration action strategies and total maximum daily loads (TMDLs).
- ✎ Develop animal Feedlot Strategy.
- ✎ Address stormwater Phase II.
- ✎ Implement smart growth policies; implement measures to preserve green space and other environmentally critical areas.
- ✎ Address sanitary sewer and permit backlog.
- ✎ Implement water quality standards program moderation.
- ✎ Upgrade state non-point source pollution control program.
- ✎ Protect water resources in Indian Country.
- ✎ Reinvent Clean and Safe Water programs.
- ✎ Release Microbial and Disinfectants/Disinfection Byproducts rules.
- ✎ Release Consumer Confidence Report regulation.
- ✎ Release Contaminant Candidate list.
- ✎ Implement the Drinking Water Revolving Fund.
- ✎ Develop safe drinking water capacity development guidance.
- ✎ Develop Public Water System Operator certification guidance.

### Office of Solid Waste and Emergency Response:

- ✎ Promulgate tailored standards governing remediation waste, expedite Resource Conservation and Recovery Act (RCRA) Corrective Action program cleanups, and use innovative approaches to move cleanups forward.

- ✚ Complete construction at National Priorities List (NPL) sites, implement Superfund reforms, maximize potentially responsible parties' (PRP) participation in conducting and funding response actions, promote fairness in the enforcement process, and recover costs from PRPs.
- ✚ Identify and reduce barriers in assessing, cleaning up and reusing formerly contaminated Brownfield properties.
- ✚ Promote construction completions, empower community stakeholders through partnership agreements and advisory boards, and promote the reuse and redevelopment of federal facilities.
- ✚ Bring additional facilities into compliance with spill prevention control and countermeasure requirements.
- ✚ Promote compliance with the requirements for upgrading, replacing, or closing underground storage tanks (USTs), accelerate cleanup initiation and completion; and promote delegation of program to states.
- ✚ Establish state, local, and tribal chemical accident release programs in meeting Clean Air Act requirements and promote public access to community right-to-know.

#### Office of Enforcement and Compliance:

- ✚ Focus on wet weather areas (Combined Sewer Overflow Policy, Sanitary Sewer Overflow Enforcement Management System, National Concentrated Animal Feeding Operations Sector Strategy, and storm water regulations).
- ✚ Enforce microbial rules under the Safe Drinking Water Act
- ✚ Focus on coal fired electric utility industry compliance under New Source Review/Prevention of Significant Deterioration
- ✚ Under the Clean Air Act, Air Toxics, encourage regions to adopt 1-2 Maximum Achievable Control Technology (MACT) standards per year in which they become national experts).
- ✚ Focus on RCRA permit evaders.
- ✚ Focus on compliance monitoring and enforcement-related activities in the petroleum refining sector
- ✚ Metal Services (Electroplating and Coating) Sector - develop a national enforcement and compliance sector strategy for metal services (electroplating and coating) sector.

*The above list is located in the "Compliance Assistance Activity Plan, Fiscal Year 2001," US EPA, Office of Compliance, April 2001. For a copy of the above document contact PRO-ACT at DSN 240-4214.*

## We Want Your Input!

PRO-ACT is interested in your comments regarding our publications and services. We welcome your input regarding environmental success stories, new technologies, best management practices, and fact sheet topic ideas. We are also interested in any documents, videos, and base environmental plans that could be included in our technical library. Please contact us at DSN 240-4214 or by email at [pro-act@hqafcee.brooks.af.mil](mailto:pro-act@hqafcee.brooks.af.mil).

## EQ Resource CD

The 2001 Environmental Quality Resource CD, Version 6.0, is available from PRO-ACT. This disc is a stand alone pollution prevention and compliance resource tool. To obtain your copy, simply contact PRO-ACT at DSN 240-4214. A special thanks to all Air Force personnel who contributed resources, especially the Environmental Quality Directorate, Headquarters Air Force Center for Environmental Excellence.

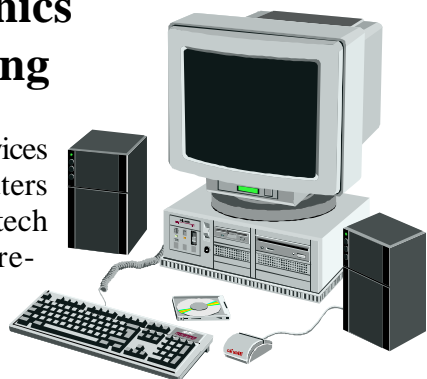
### Errata...

Table 1.0, page 4 of PRO-ACT's "Alternative Fuel Vehicles" fact sheet is missing column headings. The headings are column 1: **Requirements**; column 2: **EPAct**; and column 3: **CAA**. The corrected version is available electronically from PRO-ACT.



## Electronics Recycling

As electronic devices such as computers and other high tech equipment is replaced with new technology at



alarmingly rapid rates, many municipal solid waste landfills are becoming inundated with electronic waste. One of the main concerns that must be addressed when disposing of electronic waste is the possibility electronics contain hazardous material. Electronic items such as circuit boards, batteries, and color cathode ray tubes (CRTs) may contain lead, mercury, and hexavalent chromium, which can become a contamination problem for municipal landfills. Also, plastics used in electronics commonly contain brominated flame retardants, which can be released into the environment through incinerator ash or landfill leachate.

The quantity of electronic waste has also become a serious environmental concern. A recent EPA study shows that electronics make up 1 percent of the municipal solid waste stream. In 1998 alone, over 20 million personal computers became obsolete; of which, only 13 percent were recycled. In order to combat this problem, the EPA and other organizations are taking measures to reuse and recycle electronic components, while conserving landfill space and natural resources, and reducing air and water pollution associated with the extraction of raw materials and manufacturing processes. The following paragraphs discuss current examples of current efforts to recycle electronics.

### EPA Program

The EPA publication, "Electronics: A New Opportunity for Waste Prevention, Reuse and Recycling," available at [http://www.epa.gov/epaoswer/osw/elec\\_fs.pdf](http://www.epa.gov/epaoswer/osw/elec_fs.pdf), provides a summary of the EPA's approach to handling electronic waste. The agency is currently working with stakeholders

in the public and private sectors to determine ways to increase reuse and recycling of used electronics, and foster a life-cycle approach to product stewardship including environmentally conscious design manufacturing and toxics reduction for new electronic products.

Information on environmentally preferable procurement of electronics can be found at [www.nrc-recycle.org/Programs/electronics/index.htm](http://www.nrc-recycle.org/Programs/electronics/index.htm) and the The Northwest Product Stewardship Council has also developed a "Guide to Environmentally Preferable Computer Purchasing" available at [www.govling.org/nwpsc](http://www.govling.org/nwpsc). For information on an electronics recycling organization near you, visit the Electronics Industries Alliance (EIA), website [www.eiae.org](http://www.eiae.org) or the International Association of Electronics Recyclers [www.iaer.org/serach](http://www.iaer.org/serach).

### DRMS Program

The Department of the Interior's National Business Center (NBC) has made it possible for the Washington D.C. metro area to recycle electronics, including unserviceable computers and related equipment. Through an agreement with the DoD's Defense Reutilization and Marketing Service, all interior activities can now send electronic scrap to a NBC warehouse. The U.S. Army, Fort Meade serves as a staging facility in the metropolitan area for collecting scraps for shipment to DRMS' contractor. This agreement is also expected to enable facilities nationwide to send electronic scrap to military installations that will be designated as staging facilities for gathering and shipping electronic scrap for environmentally sensitive recycling. For more information contact Bob Jarcho, Office of Acquisition and Property Management at [RobertJarcho@ios.doi.gov](mailto:RobertJarcho@ios.doi.gov) or call at (202) 208-3329. (*Adapted from Closing the Circle News*)

### DOE Program

The Department of Energy (DOE) has started a new electronics recycling pilot program that is open to all government agencies. The program is intended to promote environmentally responsible disposition of surplus electronics and save tax dollars. Assets Utilization, part of DOE's Oak Ridge Operations in

Oak Ridge Tennessee developed a partnership working with the Community Reuse Organization of East Tennessee to establish the National Electronics Recycling Center Pilot Project. The Oak Ridge National Recycle Center (TORNRC) in Tennessee operated as the proving ground for innovative methods to recycle glass, plastics, and other material. TORNRC recycles, reconditions, refurbishes, and remarkets computers electronics and peripherals. Copper, steel, aluminum, plastic, and glass are retrieved from equipment that cannot be refurbished and reused or resold for profit.

To date, the DOE has avoided \$2.5 million in costs related to storage and disposal of obsolete electronics by sending electronics to TORNRC, where nearly 97 percent of electronics collected are recycled. The Assess Utilization, Community Reuse Organization of East Tennessee and TORNRC are looking to expand the service to include classified equipment and the recycle/reuse of suspect contaminated electronics through new teaming agreements. For additional information on using TORNRC for your agency's recycling needs contact Karen Deacon, DOE at (865)-576-4878

## Technical Inquiry Roundup

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### TI 22884 - Backflow Prevention Regulations

By Carl Lehman

PRO-ACT responded to a customer's request for information concerning whether there is a requirement for all hose bibs to have backflow prevention devices. The customer stated that he was tasked to perform a cross connection survey, and needed to know if all hose bibs require backflow prevention devices.

#### *SUMMARY OF FINDINGS:*

According to personnel at Headquarters Air Force Civil Engineer Support Agency (HQ AFCESA), information contained in the Uniform Plumbing Code (UPC), and applicable Air Force Instructions (AFIs), a backflow prevention device is only required on a hose bib if a hose is permanently connected to

it, the bib is connected to an underground lawn sprinkling system, or the bib is located at a janitor's sink. However, the customer's state regulatory agency does require a vacuum breaker backflow prevention device on all outlets (hose bibs) threaded for a hose connection.

#### *DETAILED FINDINGS:*

PRO-ACT contacted Mr. Michael Clawson, Drinking Water, HQ AFCESA/CESC, DSN 523-6362. Mr. Clawson stated that if a hose is permanently or semi-permanently connected to the hose bib, then a backflow prevention device is required. Otherwise, unless there is a specific hazard, there is no requirement for a backflow prevention device. Mr. Clawson also consulted with Mr. Al Day, HQ AFCESA/CESM, who provided the following information.

Mr. Day stated that if a hose is left connected to a hose bib and not normally removed, a backflow prevention device would be required. However, if the hose is connected, used, and disconnected, a backflow prevention device would not be required. Mr. Day provided the applicable portion of the UPC, paragraph 603.4.7, "Potable Water Outlets," which contains information concerning when backflow prevention devices are required.

We then contacted a specialist at the customer's state regulatory agency who indicated a vacuum breaker backflow prevention device is required on all fixtures (including hose bibs) that are threaded for a hose connection.

We also provided the customer with copies of the following documents that reference drinking water systems and requirements for backflow prevention devices:

1. "Plumbing Systems," AFI 32-1066. Paragraph 8 states that the installation Backflow Program Manager conducts a facility survey of plumbing devices and systems (excluding military family housing unless underground sprinkler systems are installed).

2. "Water Systems," AFI 32-1067. Paragraph 12.2 states that AFI 32-1066 outlines procedures for maintaining and installing cross-connection control and backflow prevention systems.
3. "Plumbing," Air Force Manual (AFMAN) 32-1070, Chapter 4 contains subchapters that address materials and fixtures, water supply distribution, and water piping systems. Each of these subchapters contains information about backflow prevention device requirements.
4. "Public Facility Sanitation," AFI 48-117. Paragraph 2 states that hose bibs at janitor's sinks must have a backflow prevention device.

### **TI 22876 - Marine Transfer Facilities**

*By Richard Howell*

A customer contacted PRO-ACT with a request for information concerning marine transfer facilities. The customer specifically wanted to know if there is a regulatory requirement, which requires the booming of fuel barges during off-loading operations.

#### **SUMMARY OF FINDINGS:**

The regulatory guidance requiring the booming of fuel barges during off-loading is listed in Title 33 "Navigation and Navigable Waters;" Code of Federal Regulations (CFR), Part 154.545, "Discharge Containment Equipment;" 33 CFR 154 Appendix C "Guidelines for Determining and Evaluating Required Response Resources for Facility Response Plans;" Title 62 Florida Department of Environmental Protection, "Pollution Discharge Act," Chapters 16N-16.032-.035; and Air Force Manual 32-4013 "Hazardous Material Emergency Planning and Response."

#### **DETAILED FINDINGS:**

PRO-ACT reviewed 33 CFR, Part 154.545, "Discharge Containment Equipment," which states, each facility must have ready access to enough containment material and equipment to contain any oil or hazardous material discharge on the water. The Captain of the Port (COTP) may require a facility to surround each vessel conducting an oil or hazardous material transfer operation with

containment material before commencing a transfer operation if:

1. The environmental sensitivity of the area requires the added protection;
2. The products transferred at the facility pose a significant threat to the environment;
3. The past record of discharges at the facility is poor; or
4. The size or complexity of the transfer operation poses a significant potential for a discharge of oil or hazardous material; and
5. The use of vessel containment provides the only practical means to reduce the extent of environmental damage.

We next reviewed 33 CFR Part 154, Appendix C "Guidelines for Determining and Evaluating Required Response Resources for Facility Response Plans," which identifies the resources needed to respond and contain oil discharges at marine transfer facilities.

We reviewed Title 62 Florida Department of Environmental Protection, "Pollution Discharge Act," Chapters 16N-16.032-.035, which lists the on-site containment equipment for facilities having the capacity for pollutant discharges over 10,000 gallons.

Finally, we next reviewed Air Force Manual 32-4013 "Hazardous Material Emergency Planning and Response." This document provides guidance for establishing the Hazardous Materials Emergency Planning and Response Program to meet Federal, state and local regulatory requirements.

### **TI 22878 – Clear Enamel Paint**

*By Pamela Jernigan*

A customer contacted PRO-ACT with a request for a product substitution for clear, enamel, aerosol paint, National Stock Number (NSN) 8010-00-515-2487. The customer stated his installation was using this product to paint over stencil and other markings on metal missiles in accordance with Technical Order (TO) 21M-AIM9L-06; however, there is no military specification associated with the clear paint for this application. The customer added the product could no longer be used because an

Environmental Protection Agency (EPA) code is assigned to it. Specifically, the customer requested PRO-ACT locate an EPA-17 priority pollutant-free, enamel, aerosol paint approved for use in this application.

PRO-ACT searched the Hazardous Material Information System (HMIS) and located two Material Safety Data Sheets (MSDS) for NSN 8010-00-515-2487. Our review indicated both products contain toluene, an EPA-17 priority pollutant.

We then contacted Mr. Roger Jennings, AIM 9 Missile Equipment Specialist, Warner Robins Air Logistics Center (WR-ALC/KGT), Robins AFB, GA, DSN 468-9740, who stated any clear enamel paint may be used for this application.

We next searched our Technical Inquiry database and located an EPA-17 priority pollutant-free, clear, enamel, aerosol paint, NSN 8010-01-350-5253.

PRO-ACT suggested the customer contact his installation Bioenvironmental Engineering and Environmental Management offices prior to the use of any new products to ensure any occupational health and/or environmental concerns they may have are addressed.

## **TI 22880 –Solar/Electric Vehicles**

*By Pilar Castaneda*

PRO-ACT responded to a customer's request for information on manufacturers of solar/electric vehicles. The customer specifically wanted PRO-ACT to provide contact information for manufacturers of solar/electric vehicles who will maintain the manufactured products.

PRO-ACT searched our Technical Inquiry (TI), and the Thomas Register of American Manufacturers databases; however, we were unable to locate any manufacturers of solar/electric vehicles.

We next searched the World Wide Web (WWW), located, and then contacted Mr. Kent Farmer, President, Power Store, San Antonio, TX, (210) 476-0702. Mr. Farmer stated they design and maintain all solar/electric vehicles and products manufactured by their company. Mr. Farmer indicated his company would be able to design a solar/electric vehicle that uses a solar central charging station to recharge the solar/electric vehicle when the battery charge is exhausted. He further stated his company will provide and maintain the manufactured products at any destination in the world. Mr. Farmer requested you contact him in order to discuss usage and vehicle requirements at the telephone number stated above or via electronic mail at [powerkf@flashnet.com](mailto:powerkf@flashnet.com).



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